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# COMPARATIVE ANALYSIS OF SPORTS MOTIVATION AND PECULIARITIES OF SELF-REALIZATION AMONG KAZAKHSTAN ATHLETES

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## ABSTRACT

*Athletes' true self-realization depends on the degree of mobilization of personal resources, particularly the motivational ones, which act as long-term regulators of athletes' activity. The optimal management of motivation at each stage of the sporting career, both in elite and amateur sports, predetermines athletes' self-realization to a great extent.*

*The aim of the research was to examine the motivational determinants, resilience and self-realization components and their specificity among elite athletes, amateurs, and para-Olympians.*

*The research was conducted among 180 athletes: 60 elite athletes, 60 amateurs, and 60 para-Olympians. For the purposes of the study, we used: Questionnaire for researching the motives of sports activity, Tropnikov; Questionnaire “Motives of Sports activity” (MSA), Kalinin, adapted by Y. Krasmik (2022); Psychic Resistance Test, Muddy, adapted by D. A. Leontiev and E. I. Raskazova; Multidimensional questionnaire on personality self-realization, Kudinov.*

*The results revealed different motivational profiles of elite athletes, amateur athletes, and para-Olympians and a specific hierarchy of motives. The level of self-realization of the athletes belonging to the three groups corresponds to the adaptive one. The established differences showed a higher level of self-realization in the group of elite athletes.*

**Keywords:** motivation, motives of sports activity, self-realization, components of self-realization

## INTRODUCTION

Sport is an integral part of a person's harmonious development and self-realization. It significantly influences character building and revealing human potential. According to the data taken from the Ministry of Sport and Culture, every year there are more than 25,000 sports events with over 1.2 million participants in Kazakhstan. Running, marathons, cycling and bike races, festivals, family races, and ice skating have been gaining popularity in recent years. Nowadays, the number of people engaged in physical culture and sports is 38.5% of the population of the Republic (more than 7.5 million people). In the last years, the num-

ber of people engaged in sports has increased, and there are 51,325 people with special needs among them. The Ministry plans to engage up to 50% of the population in sports activities by 2030.

The elite sports and sports for all include two interrelated aspects: training sessions and competitions related to lots of physical and psychological load (Bochaver & Dovzhik, 2016). The execution of physical activities challenges the human body beyond ordinary, routine norms. Although physical and motor skills are regarded as the most critical indicators for athletes' performance, they are not enough for them to achieve constantly high results. How-

ever, as Iancheva points out (2020), physical and technical preparation do not automatically determine athletes' achievement and level of performance. They serve only as a premise for their successful competitive realization. Psychological characteristics are one of the essential factors determining sports performance. To achieve a high level of performance, athletes should develop psychological characteristics. "Realization, sports results shown in competition, is a product of an integral manifestation of a person" (Iancheva, 2020). A lot of surveys in the field of sports psychology report on the significance of psychological factors for athletes' realization (Yarayan et al., 2018; Yarayan et al., 2020; Iancheva, 2020; Gevorki et al., 2013; Hayretin & Aydın, 2022).

The importance of psychological performance in sports is growing. Athletes struggle to increase their performance level by doing psychological skills training. There are a significant number of modern surveys on the development of psychological performance (Karaca & Gündüz, 2021; Kaplan & Andre, 2021; Rye & Kaya, 2021; Cankurtaran, 2020). Sports psychologists emphasize that psychological skills training is vital in developing athletes' psychological characteristics. The authors highlight some major factors that stand out in developing the essential psychological characteristics: motivation, confidence, anxiety, psychic preparation, concentration, goal setting, imagination, and psychic resistance.

Motivation in sports is not only a major personal characteristic of athletes, leading to achieving the set goal. It influences the nature of all processes of sports activity (Ilyin, 2011). Motivation directly affects sports results. According to R. A. Piloyan and V. F. Sopov (2017), the dependence of sports success on motivation characteristics is a fact that need not be proven (Mnatsakanyan & Sopov, 2017).

During the preparation for a competition,

motivation is necessary for the development and execution of sports skills, self-development, and self-realization. Motivation drives athletes to learn a new skill successfully through hard and long training sessions. Circumstances, such as monotony and dullness of the training process, dissatisfaction with the achieved results, and negative attitude toward the strict regime and schedule of the sports routine may negatively influence athletes' motivation and lead to loss of stimulus for constant physical load and for training, as a whole. From a psychological point of view, a reason for the decrease in motivation could be underestimating the significance of daily training sessions and exercises for sports self-improvement (Mnatsakanyan, 2017).

Motivation is viewed as the basis of sports activity and a leading component in athletes' psychological preparation, a major condition of the psychological and pedagogical interaction between coaches and athletes in forming positive and high motivation for achieving sports results. Athletes' motivation greatly determines the high level of physical, technical, tactical, and psychological readiness and, as a result - competition readiness (Mnatsakanyan et al., 2016; Vorozheikin & Volkov, 2021).

Motivation is related to the efforts invested by athletes and is the major component of high sports performance. Motivation dynamics determine a sports career's success (Sergeeva, 2011). However, it is essential to point out that it is not only determined by the motive of achievement. Athletes' motives undergo changes - changes related to a rise in qualification and changes related to their emotional state.

Motivation management is needed at all stages of athletes' development, especially at the peak of their sports careers. What is more, the high level of motivation for engagement in sports is regarded as one of the basic and

necessary factors contributing to athletes' personal self-realization (Bagadirova, 2019). The constantly growing requirements for physical preparation, tough competitions, and increasing information flow, which has to be perceived, processed and applied quickly, deteriorate athletes' physiological condition and deplete their motivational resources (Pankratova, 2021). Underestimating the role of the motives and their change over time, both for athletes and coaches, may lead to athletes being unable to manifest their abilities and show the maximum of their potential in sport (Derkach & Ryabina, 2012).

Sports activity is indicative of how many of the activity resources athletes have used for their self-realization. The true self-realization of athletes depends on the degree of mobilization of their personal resources, mostly motivational ones (Ulyaeva et al., 2014; Gorskaya, 2017), which act as long-term regulators of athletes activity (Gorskaya, 2017), and on the domination of certain strategies for self-realization (Tolkunova & Biruk, 2010). However, the observations of many years and experience show that not all athletes reach the desired self-realization in sports activity. This is due to other objective reasons – economic reasons, injuries, different force major circumstances, etc.

Rumyantseva's research (2001) found that the number of persons with a high level of self-realization was about 37% of all athletes. According to her, a person's self-realization is aided by a high level of motivation for sport, a person's pursuit of the highest sports results, and objective evaluation criteria regarding the athletes' performance results (Rumyantseva, 2001).

A survey by Gorskaya (2017) found that athletes' self-realization was determined by the development of general psycho-motor abilities, conscious self-regulation of actions

and psychic conditions, realistic goal setting, adequate self-assessment, and constructive relations with the social environment (Gorskaya, 2017).

Baradigova (2019) believes that the specificity of sports activity (kind of sport) impacts athletes' abilities for self-realization. In the structure of athletes' self-realization, she identifies the following components: motivational-goal oriented component (allows management, sets the direction, and defines the personal resources needed for self-realization), content component (characterizes the normative and creative forms, methods, and means of activity used in the process of self-realization), and an evaluation and result component (allows athletes to analyze the results from their activity and to predict the direction of self-realization) (Bagadirova, 2019).

Calvo et al. (2010) suppose that self-realization plays a vital role in whether athletes decide to continue doing the sport and pursue their sports career. Some research shows strong positive and negative correlations between self-actualization, engagement in sports (Ma, 2021), and athletes' burnout (Holmberg, 2013; Mouratidis et al., 2011). Others reveal that the level of self-realization in sports is significantly influenced by social context (Keegan et al., 2010), autonomy support on behalf of the coaches (Gillet et al., 2010), team support (DeFreese et al., 2013), perfectionism (Mouratidis et al., 2011), sense of competence (Banack et al., 2011), motivation, and motivational climate (Ahmadi et al., 2012).

Self-realization and sports motivation are two psychological constructs strongly related to achieving high sports results. The researchers view their connection differently. Some authors rank self-realization to the highest level of a person's motivational structure

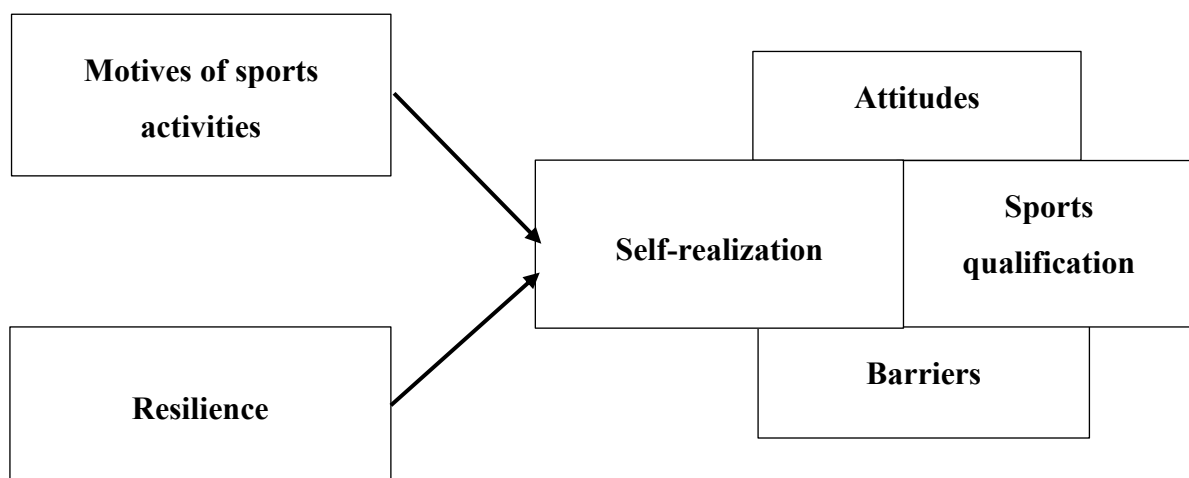
(Maslow, Leontiev, Dessi & Rayon). Other authors view motivation as only one of the components of self-realization (Korostileva, Kudinov, Bagadirova).

In this research, sports motivation is viewed as a major predictor of athletes' self-realization in sports, as an element that allows for maintaining a high level of motivation. To build motivation for transformational coping, we include the component of athletes' resilience. The phenomenon of resilience is a standard indicator of a person's psychic health. It reflects the three major life attitudes: risk preparedness, confidence in the ability to control events, and life engagement. It is considered a psychological mediator that helps cope with stress and preserves a person's potential for personal realization in stressful life situations, which is in the basis of self-realization (Kudinov et al., 2015; Kudinov et al., 2017).

In the last decades, resilience has enjoyed a growing interest and has been researched in the psychology of high-performance sport (Khalid et al., 2022). The surveys have found a significant number of variables that help athletes maintain resilience – among them are social support, motivation, confidence, and focus (Hill et al., 2018).

This provoked our scientific and practical interest in researching the motivation determinants whose specifics and quality ensure, to a great extent, athletes' self-realization and achieving high sports results.

In this relation, we researched the structure of sports motivation, resilience, participation in sports activities, risk-taking, self-realization attitudes, and the barriers that encourage or prevent athletes' self-realization. The theoretical frame of the research is shown in Figure 1.



**Figure 1.** Theoretical grounds of the research on motivation determinants of athletes' self-realization

The aim of this research was to examine the motivational determinants, resilience and self-realization components and their specificity in manifestation among elite athletes, amateurs, and para-Olympians.

**METHODOLOGY**

Sports facilities: The research was done at the Sports Academy in Almaty, Kazakhstan Arm-wrestling Federation, Kazakhstan Weight-lifting Federation, Powerlifting Federation APF, The Federation of Para-Olym-

pic Sport of Kokchetav, Shikment, Taraz. All participants were informed about the research aims and granted their informed approval.

The research was done among 180 athletes: 60 elite athletes, 60 amateur athletes, and 60 para-Olympians (96 men and 84 women). The mean age of the men was 26.5 years, and the mean age of the women was 25.9 years.

The sample included representatives of various sports: running, triathlon, powerlifting, bodybuilding, judo, rowing, volleyball, karate, football, rhythmic gymnastics, Kudo, gymnastics, athletics, table tennis, close combat, etc.

The athletes were divided into three groups: professionals, amateurs (non-professional athletes who practice sports for fun or to keep fit), and para-Olympians.

Including the para-Olympians in the research created some difficulties despite the active cooperation of the Paralympic sports federations' management.

### **Research method**

- To fulfill the aim of the research, we used:
1. Questionnaire for researching the motives of sports activity - V. I. Tropnikov (1989). The questionnaire includes 109 questions and allows one to determine the degree of significance of 12 motives for sports activity: communication, cognition, material goods, development of character and mental qualities, physical perfection, improvement of well-being and health, aesthetic pleasures and thrills, acquiring useful skills and knowledge for life, the need of approval, increasing prestige, desire for fame, and collectivistic orientation.
  2. Questionnaire "Motives of Sports activity" – Kalinin (1974), which includes 50 questions aimed at researching five motives: achievement, fight, self-perfection, communication, and encouragement. The questionnaire was adapted for a Kazakhstan

sample by Y. Krasmik in 2022 and shows excellent psycho-metric characteristics – Crombach's alpha  $\alpha = .966$ .

3. Psychic Resistance Test, Muddy (1984), adapted by D. A. Leontiev and E. I. Ras-kazova (2013). The test consists of 45 questions and includes four subscales: risk readiness, control, engagement, and general level of resilience.
4. Multidimensional questionnaire on personality self-realization – S. I. Kudinov (2017). The questionnaire allows one to determine the peculiarities of the self-realization of a person and includes 101 questions. The methodology comprises 16 bipolar scales which characterize the opposites in the activity, behavior, and communication: 1 – reasonableness of goals – values of self-realization; 2 – awareness of goals and values (value-target component); 3 – vigor; 4 – energy (dynamic component); 5 – optimism; 5 – pessimism (emotional component); 7 – internality; 8 – externality (organizational component); 9 – sociocentrism; 10 - egocentrism (motivational component); 11 – creativity; 12 – conservatism (cognitive component); 13 – constructiveness; 14 – destructiveness (prognostic component); 15 – social barriers before self-realization; 16 - personal barriers before self-realization (competence-personal component).

### **Statistical Analysis**

The statistical processing of the data was done with the program package SPSS, version 26.0. We used descriptive and comparative analyses – Kruskal-Wallis' N-criteria and Mann-Whitney's U-criteria for the cases of three or more independent samples.

## **RESULTS AND ANALYSIS**

The results from the descriptive statistics of the motives of sports activities are presented in Table 1.

**Table 1.** Results from the descriptive statistics of the motives of sports activity

<b>Elite Athletes</b>					
	The need to achieve	The need to fight	The need for self-improvement	The need for communication	The need for encouragement
M	32.5	28.8	31.3	24.0	27.5
<b>Amateur Athletes</b>					
	The need to achieve	The need to fight	The need for self-improvement	The need for communication	The need for encouragement
M	30.7	27.5	29.8	22.3	23.0
<b>Para-Olympians</b>					
	The need to achieve	The need to fight	The need for self-improvement	The need for communication	The need for encouragement
M	30.9	27.6	31.1	23.9	26.4

The profile of the motives of sports activity revealed that for the elite athletes, the achievement motivation was the leading one (M = 32.5), followed by the motive of self-improvement (M = 31.3), and the need to fight came third (M = 28.8). The motivational profile of the amateur athletes was similar to that of the elite athletes, but there were lower values for achievement motives (M = 30.7) and self-improvement motives (M = 29.8). They were within the boundaries of the optimal values and contributed to maintaining a stable level of motivation in training. There was a much more different motivational profile in the group of the para-Olympians. The leading motive was that of self-improvement

(M = 31.1). There were optimal motivation values for self-improvement (M = 31.1) and achievement (M = 30.9).

Table 2 presents the results from the comparative analysis of the motivational profile using Kalinin’s method.

The data presented in Table 2 show there were significant differences in three motives: fight ( $p = .042$ ), communication ( $p = .002$ ), and encouragement ( $p = .021$ ). All three motives were more strongly expressed in the motivational profile of the elite athletes.

There was a tendency of differences in the need to achieve ( $p = .072$ ), which showed the greater significance of this motive for the para-Olympians.

**Table 2.** Results from the comparative analysis of the data of the three groups of athletes

	The need to achieve	The need to fight	The need for self-improvement	The need for communication	The need for encouragement
Chi-Square	4.990	5.780	3.223	12.362	7.752
df	2	2	2	2	2
Asymp. Sig.	.072	.042	.200	.002	.021

a. Kruskal Wallis Test

The analysis of the degree of significance of the 12 motives of sports activity according to the methodology of V. I. Tropnikov (1989) in the groups of elite athletes and para-Olympians revealed the following hierarchy of the

motives of sports activity (Table 3): the group of the leading motives included four motives – a motive for physical improvement, a motive for increasing the prestige, a desire for fame, a motive for development of character and

psychic qualities, and a motive for aesthetic pleasure and thrill-seeking. The hierarchy was similar in the group of amateur athletes (Table 3). Still, there were three motives in the group of the leading ones: a motive for physical per-

fection (M = 38.7), a motive for the development of character and mental qualities (M = 30.9), and a motive for aesthetic pleasure and thrill-seeking (M = 30.0).

**Table 3.** Results from the descriptive statistics

Elite Athletes											
	Com	Cog	MG	CDMQ	PP	IWBH	APT	AUSK	NA	IPF	CO
M	20.3	12.7	19.9	31.2	35.3	20.3	31.1	17.6	14.4	33.1	21.5
Amateur Athletes											
	Com	Cog	MG	CDMQ	PP	IWBH	APT	AUSK	NA	IPF	CO
M	20.3	11.5	16.7	30.9	38.7	23.9	30.0	16.7	11.8	24.9	16.6
Para-Olympians											
	Com	Cog	MG	CDMQ	PP	IWBH	APT	AUSK	NA	IPF	CO
M	24.0	14.1	20.6	32.3	39.5	23.5	34.0	18.6	14.9	33.7	23.1

**Legend:** Com - the motive of communication; Cog - the motive of cognition; MG - the motive of material goods; CDMQ - the motive of character development and mental qualities; PP - the motive of physical perfection; IWBH - the motive of improving well-being and health; APT- the motive of aesthetic pleasure and thrills; AUSK - the motive of acquiring useful skills and knowledge for life; NA - the motive of the need for approval; IPF - the motive of increasing prestige, the desire for fame; CO –the motive of a collectivistic orientation.

Table 4 presents the results from the comparative analysis of the motivational profile according to Tropnikov’s questionnaire.

**Table 4.** Results from the comparative analysis of the degree of significance of the motives in the three groups of athletes

	The motive of communication	The motive of cognition	The motive of material goods	The motive of character development and mental qualities
Chi-Square	18.534	10.153	52.202	37.120
df	2	2	2	2
Asymp. Sig.	.000	.006	.000	.000
	The motive of physical perfection	The motive of improving well-being and health	The motive of aesthetic pleasure and thrills	The motive of acquiring useful skills and knowledge for life
Chi-Square	11.393	7.815	24.597	11.572
df	2	2	2	2
Asymp. Sig.	.003	.020	.000	.003
	The motive of the need for approval	The motive of increasing prestige, the desire for fame	The motive of a collectivistic orientation	
Chi-Square	7.815	24.597	23.184	
df	2	2	2	
Asymp. Sig.	.020	.000	.000	

a. Kruskal Wallis Test

The data presented in Table 4 showed significant differences regarding all 12 researched sports activity motives in the three athlete groups.

The motive of communication ( $p = .000$ ) was more strongly expressed among elite athletes. They found greater pleasure in the training sessions with friends, the possibility of being part of the team, and having fun with the others during the training sessions.

The motive of cognition ( $p = .006$ ) was extensively developed among the para-Olympians. They were more oriented toward broadening their horizons, finding new approaches to the training sessions, and wanting to know famous athletes and learn more about their lives.

The motive of material goods ( $p = .000$ ) was most strongly expressed among the elite athletes. They were more interested in the material component of sports activities, the possibility of receiving a place to live, benefits, and the likelihood of visiting different countries worldwide.

The motive for developing character and psychic qualities ( $p = .000$ ) was more strongly developed among amateur athletes and para-Olympians. They were focused on developing qualities such as purposefulness, determination, bravery, perseverance, will, etc.

The motive of physical perfection ( $p = .003$ ) was leading among the amateur athletes and para-Olympians. They were oriented toward building muscles, developing coordination, strength, agility, endurance, etc.

The motive of self-improvement and health improvement ( $p = .020$ ) was more strongly developed among amateur athletes. They were seeking self-perfection, losing

weight, and maintaining a certain level of physical activity.

The motive of aesthetic pleasure and thrill ( $p = .000$ ) was most powerfully expressed by the para-Olympians. It reflected their orientation toward beauty in sport, not only as regards aesthetics but also in the choice of fighting tactics.

The motive of acquiring useful knowledge and skills for life ( $p = .003$ ) was most strongly developed among the para-Olympians. They found it important to develop skills appreciated by other people, and that could be useful not only in sports activities but also in other areas of life.

The motive of the need for approval ( $p = .000$ ) dominated among the elite athletes, as expected. It was essential that their coaches, friends, and relatives took notice of their results, supported them in competitions, and took pride in their victories.

The motive of increasing prestige and the desire for fame ( $p = .000$ ) received the highest values among the para-Olympians, who were more willing to develop self-confidence and authority through sports.

The motive of collectivistic orientation ( $p = .000$ ) was also more strongly developed among the para-Olympians. They liked the sense of being a team, the possibility of being part of it and defending its honor in competitions.

The analysis of the results revealed that the general level of resilience of the elite athletes was  $M = 78.9$ , of the amateurs –  $M = 77.8$ , and para-Olympians –  $M = 71.3$  (Table 5), which corresponds to the average level of sustainable coping in stressful situations and is indicative of motivation for transformational coping in training, competitions, and in case of injuries.



**Table 5.** Mean values of the components of resilience in the three groups of athletes

<b>Elite Athletes</b>				
	Involvement	Control	Risk-taking	Resilience level
M	34.1	27.9	16.9	78.9
<b>Amateur Athletes</b>				
	Involvement	Control	Risk-taking	Resilience level
M	33.8	27.7	16.3	77.8
<b>Para-Olympians</b>				
	Involvement	Control	Risk-taking	Resilience level
M	29.0	26.5	15.8	71.3

We used comparative analysis to research the differences in the expressiveness of the athletes. The results are presented in Table 6.

**Table 6.** Results from the comparative analysis of the components of resilience in the three groups of athletes.

	<b>Involvement</b>	<b>Control</b>	<b>Risk-taking</b>	<b>Resilience level</b>
Chi-Square	11.437	4.370	10.729	8.801
df	2	2	2	2
Asymp. Sig.	.003	.112	.005	.012

a. Kruskal Wallis Test

There were significant differences in the development of the resilience components regarding involvement, risk-taking, and general level of resilience in the three groups of athletes (Table 6). The component Inclusion ( $p = .003$ ) received the highest values among the amateur athletes. They were more committed to the sports activities, enjoyed the training sessions, and felt that sport was the right choice.

There were significant differences regarding the component Risk-taking ( $p = .005$ ). It was most strongly expressed among the elite athletes who were primarily oriented toward gaining experience from their errors, victories, and losses and were ready to take risks in competitions for wins and high results.

There were significant differences in the general level of resilience ( $p = .012$ ). It was higher among the elite athletes and amateurs than among para-Olympians. Their motivation for transformational coping was sufficiently built to overcome all obstacles they faced in their sporting activities.

The analysis of the results from the research on self-realization revealed that the general level of self-realization in the three groups corresponded to the average adaptive level and showed moderation, aspiration not to be worse than the others, and desire to achieve better results than the others in the sports activity. Nevertheless, professional self-realization in sport was extremely low (Table 7).

**Table 7.** Mean values of the components of self-realization in the three groups of athletes

<b>Elite Athletes</b>										
	VtC	DC	EC	OC	MC	CC	PC	CpC	PS	GLS
M	6.4	5.4	7.9	8.7	-3.2	8.5	8.3	-2.0	-3.8	21.8
<b>Amateur Athletes</b>										
	VtC	DC	EC	OC	MC	CC	PC	CpC	PS	GLS
M	6.0	4	7.2	9	-1.6	8	7.4	-2.6	-4.6	21.1
<b>Para-Olympians</b>										
	VtC	DC	EC	OC	MC	CC	PC	CpC	PS	GLS
M	5.8	4.2	6.8	9.1	-0.4	7.6	6.9	-1.4	-2.8	20.5

**Legend:** VtC - Value-target component; DC - Dynamic component; EC - Emotional component; OC - Organizational component; MC - Motivational component; CC - Cognitive component; PC - Prognostic component; CpC - Competence-personal component; PS - professional self-realization; GLS - general level of self-realization

Elite and amateur athletes were dominated by three self-realization attitudes: creativity (cognitive component), internality (organizational component), and constructivity (prognostic component). The para-Olympians were overwhelmed by the attitudes toward internality (organizational component),

creativity (cognitive component), and significance of values and goals (value-target component).

We further compared the expressiveness of self-realization components and aspects in the three groups of athletes. The obtained data are presented in Table 8.

**Table 8.** Results from the comparative analysis of self-realization components

	<b>Value-target component</b>	<b>Dynamic component</b>	<b>Emotional component</b>	<b>Organizational component</b>
Chi-Square	89.835	64.990	83.545	95.066
df	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000

a. Kruskal Wallis Test

	<b>Motivational component</b>	<b>Cognitive component</b>	<b>Prognostic component</b>	<b>Competence-personal component</b>
Chi-Square	12.357	78.397	93.255	20.783
df	2	2	2	2
Asymp. Sig.	.002	.000	.000	.000

a. Kruskal Wallis Test

	<b>Personal self-realization</b>	<b>Social self-realization</b>	<b>Professional self-realization</b>	<b>The general level of self-realization</b>
Chi-Square	6.721	1.372	1.561	3.367
df	2	2	2	2
Asymp. Sig.	.035	.504	.458	.186

a. Kruskal Wallis Test

The analysis of the results from the comparative analysis (Table 8) revealed the existence of significant differences in all self-realization components and the aspect of personal self-realization.

The component Value-target ( $p = .000$ ) was better developed among amateur athletes and para-Olympians, who were more oriented toward the desire to fulfill their full potential in different fields to obtain big dividends. In contrast, the elite athletes were oriented toward achieving results benefiting their team and their country.

The dynamic component ( $p = .000$ ) was better developed among the elite athletes (the scale was reversed). They were more active and vigorous in the process of self-realization.

There were significant differences regarding the Emotional component ( $p = .000$ ). The differences revealed a domination of positive psycho-emotional moods among the elite athletes. In contrast, para-Olympians and amateur athletes tended to dramatize the situations.

The results from the comparative analysis revealed significant differences regarding the Organizational component ( $p = .000$ ). The elite athletes demonstrated higher self-control and better control over their behavior, actions, and reactions during self-realization. The high level of self-control allowed them to foresee the situations and to pursue high sports results confidently. However, the para-Olympians and amateur athletes showed an expressed weakness in self-control and self-organization in self-actualization and achieving sports results.

There were also significant differences regarding the motivational component ( $p = .002$ ). They revealed a domination of socially approved motives for self-realization among elite athletes. Highly personal motives were prevalent among para-Olympians and amateur athletes, providing them with a personal

advance, financial independence, authority, power, and development of certain qualities and abilities.

There were also significant differences in the cognitive component ( $p = .000$ ). The differences showed the existence of various self-realization schemes among elite athletes. Para-Olympians and amateur athletes were characterized with well-known, standard schemes for self-expression, greatly predetermined by the peculiarities of the professional realization. They were not willing to change anything in their sports activities even if they were not satisfied.

There were significant differences in the prognostic component ( $p = .000$ ). The differences showed positive results from the process of self-realization among the elite athletes. Among para-Olympians and amateur athletes, instead of satisfaction, self-expression brought disappointment in their abilities and opportunities and a loss of self-confidence.

There were significant differences in the competence-personal component ( $p = .000$ ). The elite athletes were characterized with predominant social barriers before self-realization. Para-Olympians and amateur athletes reported personal barriers before self-realization as a leading factor.

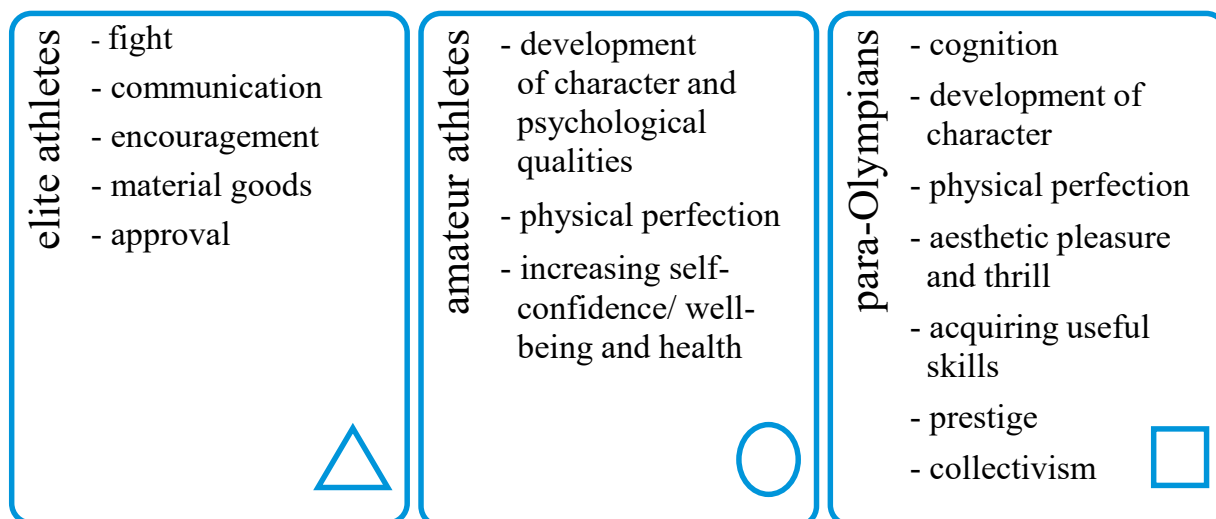
Elite athletes had a significantly higher aspiration for personal development and growth and self-expression of personal qualities aiming at achieving higher results in their personal and spiritual development, which reflected self-realization ( $p = .035$ ).

## DISCUSSION AND CONCLUSION

The results obtained from our research and the data from the comparative analysis of the motivational structure of the three groups of athletes allow us to outline their specific motives (Figure 2).

The most important motives for elite athletes are fighting, communication, encouragement, material goods, and approval. According to V. F. Sopov, these motives correspond to the elite athlete's motivational model (Sopov, 2010). The data obtained in this research, as

a whole, support the results from Archinina's survey (Archinina et al., 2019), according to which professional athletes have a reliably greater need for achievements, fight for these achievements, self-perfection, and material stimulation for the achievements.



**Figure 2.** Specific peculiarities of motivation among the different groups of athletes

The most important motives for amateur athletes are those for developing character and psyche, psychical perfection, self-perfection, and health. A survey by Bochaver et al. (Bochaver et al., 2021) also showed the significance of the motives of looks, physical self-perfection, and health for amateur athletes.

Castro-Sánchez et al. also reported similar dynamics of change in the motives (2019). In research, they revealed that task orientation was predominant among elite athletes, and ego orientation and goal orientation were predominant among amateur athletes.

For para-Olympians, the greatest importance is placed on the motives for cognition, development of character and psyche, physical perfection, aesthetic pleasure and thrill, acquiring useful skills, increasing prestige, and collectivism. We can see the importance of collectivism for para-Olympians and their desire to socialize. Research done among athletes

with impaired sight showed that achieving social identity and regulating social relationships were essential to their motivation for sports achievements (Seyedi et al., 2022).

The general resilience level of professional athletes, para-Olympians, and amateur athletes corresponds to the average level of sustainable coping in stressful situations. It shows a built motivation for transformational coping in training, competitions, and in cases of injuries. The results obtained from this research reveal that the motivation for coping manifested as engagement, risk-taking, and control, is changed in the self-realization of the athletes and a certain level of sports qualification. Seeing resilience not only as a motivation for coping but also as existential bravery allowing us to overcome difficulties in training and competition, we can also see the manifestation of resilience as a specific stylistic characteristic of the motivation for coping and overcoming.

The results from our research show that amateur athletes are engaged in their sporting activities and are relatively stable to stress. Elite athletes are more concentrated on analyzing their sports experience and risk in competitions. Para-Olympians are less emotionally stable in competitions. They are convinced that their activity can rarely influence the outcome of stressful events and that they should not act in every situation at any cost, controlling and influencing the existing events. Amateur and elite athletes are characterized with higher motivation for coping and existential bravery.

In research on athletes' self-realization, it is usually examined not on the basis of psychological indicators but on the basis of certain sports qualifications or athletes' participation in international competitions and the achieved results (Ulyaeva et al., 2021; Kolosov et al., 2019). In this research, we studied the issue of self-realization from a systematic point of view, which allowed us to view the components and types of self-realization. Our results correspond to those obtained by Kudinov (2012) and Rusu (2019).

The general level of self-realization in the three groups corresponds to the average level. Still, professional self-realization in sport is low, and new strategies for self-realization should be created. Elite and amateur athletes have three domineering self-realization attitudes - creativity, internality, constructivism, and correspondingly three more developed components of self-realization – cognitive, organizational, and prognostic. There are three prevalent self-realization attitudes among para-Olympians – creativity, internality, rational values and goals, and correspondingly three more developed components of self-realization – cognitive, organizational, and value-target.

The comparative analysis of self-realization components showed that the level of personal self-realization is significantly higher in

the group of professional athletes. As a whole, the development of their self-realization components shows a higher potential for self-realization. The level of development of the potential for self-realization of the other two groups is similar. They strive more for self-positioning. They are characterized by selfish motivation and anticipations that the success of their self-realization should come from the circumstances, the other people, leaders on different levels, authorities, and the country.

Elite athletes are characterized with subjective personal self-realization attitudes, positive attitudes, activity, a high level of responsibility, and socio-centric motivation for self-realization.

In conclusion, we can summarize that, as a whole, despite the differences, the level of self-realization in the three groups was not high and corresponded to the adaptive level.

This research has some limitations. On the one hand, this is the relatively small number of researched individuals, which does not allow us to draw definitive conclusions. Carrying out the research in the para-Olympian group was related to some difficulties.

Expanding the number of individuals and the types of sports studied would create the conditions for more in-depth analysis and validation of the data obtained. This would create more personalized motivational profiles in different groups of athletes in other sports.

Including Paralympians in periodic psychological research would lead to their fuller social inclusion. This would positively impact their confidence and status as valuable members of the sporting family.

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